AMENDMENTS TO THE CLAIMS

Following is a complete set of claims as amended with this Response. This complete set of claims includes amended claim 1 and new claims 22-25.

1. (Currently Amended) An implantable medical lead comprising:

a lead body having a proximal end carrying a connector assembly adapted to be received by an implantable medical device and a distal end, and at least one electrode connected to the lead body; the lead body further comprising:

an insulating housing defining an outer surface and enclosing at least one electrical conductor connecting the at least one electrode with the connector assembly;

a flexible membrane surrounding said insulating housing, the membrane having an inner surface confronting the outer surface of said housing; and

a lubricious medium disposed between the inner surface of the membrane and the outer surface of the housing;

wherein flexibility of the membrane and the properties of the lubricious medium enable the membrane to slide over the insulating housing and deform as the insulating housing moves relative to a patient's body tissue; and

wherein relative motion between the membrane and the insulating housing reduces abrasive wear of the lead body.

2. (Original) The lead of claim 1 in which:

said confronting surfaces define between them a sealed space containing said lubricious medium.

3. (Original) The lead of claim 2 in which:

the membrane has a sealed distal end located proximally of said at least one electrode and a sealed proximal end located distally of the connector assembly.

4. (Original) The lead of claim 2 in which:

the lubricious medium comprises a biostable, biocompatible, medical grade material selected from the group consisting of silicone oil, silicone gel, silicone foam, silicone grease, PTFE powder, mineral oil, mineral paste and mineral powder.

5. (Original) The lead of claim 4 in which:

the volume of the lubricious medium contained in said sealed space comprises approximately .01 cc per linear cm of the length of said space.

6. (Original) The lead of claim 1 in which:

said lubricious medium comprises a lubricious coating on at least one of said surfaces.

7. (Original) The lead of claim 1 in which:

the membrane has a tubular configuration.

8. (Original) The lead of claim 7 in which:

the membrane is disposed over said outer surface of said housing in an interference fit.

9. (Original) The lead of claim 7 in which:

the membrane is disposed over said outer surface of said housing in a clearance fit.

10. (Original) The lead of claim 7 in which:

the membrane is disposed over said outer surface of said housing in an even fit.

11. (Original) The lead of claim 1 in which:

the insulating housing is fabricated of silicone rubber.

12. (Original) The lead of claim 1 in which:

the membrane comprises a biostable, biocompatible, medical grade, elastic material selected from the group consisting of silicone rubber, polyurethane, polyester, a woven fabric, a knitted fabric, a composite fabric, a memory shaped polymer and a silicone-urethane copolymer.

13. (Original) The lead of claim 1 in which:

said distal end of the lead body carries at least two, spaced-apart electrodes comprising a distal electrode and a proximal electrode;

said membrane is located between said distal and proximal electrodes; and

wherein the lead further includes:

a second, thin, flexible membrane surrounding said insulating housing, said second membrane being located between the proximal end of the proximal electrode and the distal end of the connector assembly, the second membrane further having an inner surface confronting the outer surface of said housing; and

a lubricious medium between said inner surface of said second membrane and said outer surface of said housing, said lubricious medium facilitating movement of said insulating housing relative to the second membrane in response to frictional engagement of the second membrane with adjacent structure.

14. (Original) The lead of claim 13 in which:

each of said lubricious media comprises a biostable, biocompatible, medical grade material selected from the group consisting of silicone oil, silicone gel, silicone foam, silicone grease, PTFE powder, mineral oil, mineral paste and mineral powder.

15. (Original) The lead of claim 13 in which:

each of said lubricious media comprises a lubricious coating on at least one of said surfaces.

16. (Withdrawn) A method of fabricating an implantable medical lead, the method comprising:

providing an elongated member;

enclosing a portion of the elongated member in a membrane having a distal end and a proximal end;

sealing one of the ends of the membrane to the elongated member;

injecting a lubricious medium into the space defined between the membrane and the elongated member; and

sealing the other end of the membrane to the elongated member.

17. (Withdrawn) The method of claim 16 in which:

the membrane comprises a thin, stretchable, tubular structure.

18. (Withdrawn) The method of claim 17 further comprising:

before sealing the other end, stretching the membrane so that it lies against the elongated member.

19. (Withdrawn) A method of fabricating an implantable medical lead, the method comprising:

providing an elongated, partially completed lead body;

enclosing a portion of the lead body in a membrane having a distal end and a proximal end;

sealing the ends of the membrane to the lead body; and

injecting a lubricious medium through the membrane into the space defined between the membrane and the lead body.

20. (Withdrawn) The method of claim 19 further comprising:

sealing the portion of the membrane through which the lubricious medium was injected.

21. (Withdrawn) A method of fabricating an implantable medical lead, the method comprising:

providing an insulating housing having an outer surface;

enclosing a portion of the housing in a membrane having an inner surface, a distal end and a proximal end, wherein at least one of the outer surface of the housing and the inner surface of the membrane has a lubricious coating; and

attaching the ends of the membrane to the outer surface of the housing.

22. (New) The lead of claim 1 in which:

the lubricious medium is a fluid, and the confronting surfaces define between them a fluid-tight interface space sealed at opposite ends to contain the fluid.

23. (New) The lead of claim 1 further comprising:

a fluid-tight chamber having a first surface defined by the outer surface of the insulating chamber and a second surface defined by the inner surface of the membrane.

24. (New) The lead of claim 23 in which:

the lubricious medium is injectable into the fluid-tight chamber.

25. (New) The lead of claim 1 in which:

membrane deformation comprises wrinkle, twist or wind.